





Applicant:

Joel E. Saine

Serial No: Filing Date:

10/510,551 October 7, 2004

Art Unit:

2877

Examiner:

Unknown

Title:

APPLICATOR AND NOZZLE FOR DISPENSING

CONTROLLED PATTERNS OF LIQUID MATERIAL

Conf. No.:

7336

Atty Docket:

NOR-1051A

Cincinnati, Ohio 45202

April 29, 2005

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

## INFORMATION DISCLOSURE STATEMENT

In accordance with the duty of candor and good faith imposed by

37 C.F.R. §1.56 and means of complying therewith according to 37 C.F.R.

§§1.97 and 1.98, the references listed on the attached Form PTO-1449 are

called to the attention of the United States Patent and Trademark Office in connection with the above-identified patent application.

The Examiner is urged to consider all of the cited documents and to make an independent evaluation of the teachings and materiality of each.

Applicants believe that this communication is being mailed before a first action on the merits and, therefore, no fee is due. If this is not the case, the Commissioner is authorized to charge deposit account 23-3000 for any required fees.

Respectfully submitted,

WOOD, HERRON & EVANS, L.L.P.

Kevin G. Rooney

Reg. No. 36,330

2700 Carew Tower 441 Vine Street Cincinnati, OH 45202 (513) 241-2324

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| SUBSTITUTE<br>(MODIFIED)   | 144 | 9   |          |      |                                  | U.<br>Pa    | S. DEPARTMI<br>ATENT AND T | ENT OF COMMERCE RADEMARK OFFICE |                    |                           |  |                            | SERIAL NO.<br>10/510,551 |            |                               |  |
|--|-----|---|----------|------|----------------------------------|-------------|----------------------------|---------------------------------|--------------------|---------------------------|--|----------------------------|--------------------------|------------|-------------------------------|--|
|  | 61  | P   | INI<br>P | FOF  | RMA<br>EME                       | TIO<br>NT   | N D<br>BY                  | ISCL<br>APPI                    | OSURE<br>LICANT    |                           |  | APPLICANT<br>Joel E. Saine |                          |            |                               |  |
| (37 CFR 1.98)  | /   |   |          | 4    |                                  |             |                            |                                 | ecessary)          |                           | FILING DATE GROUD Cotober 7, 2004 2877 |                            |                          |            | JP                            |  |
|  | MAY | 0 7   | 20       | 105  | <b>1 1 2 3 3 3 3 3 3 3 3 3 3</b> |             |                            |                                 | U.S. F             | PATENT DOCUMENTS          |  | ·                          |                          |            |                               |  |
| EXAMINER<br>INITIAL  | A.A | RAP   | EN       |      | NT N                             | IUM         | BEF                        | ₹                               | ISSUE<br>DATE      | PATENTEE                  | CLASS                                  |                            | SUBCLASS                 |            | FILING DATE<br>IF APPROPRIATE |  |
|  | A.A | R   | Ε        | 3    | 3                                | 4           | 8                          | 1                               | 12/1990            | Ziecker et al.            |  | 339                        | 298                      |            |                               |  |
|  | A.B | 4 0 3 1 8 5 4 6/1977 Sprague, Jr.   |          |      |                                  |             |                            |                                 | 6/1977             | Sprague, Jr.              |  | 118                        | 641                      |            |                               |  |
|  | A.C | 4 1 3 5 9   |          |      |                                  |             | 0                          | 3                               | 1/1979             | Ohsato et al.             |  | 65                         | 5                        |            |                               |  |
|  | A.D | 4   | 1        | 8    | 5                                | 9           | 8                          | 1                               | 1/1980             | Ohsato et al.             | _                                      | 65                         | 5                        |            |                               |  |
|  | A.E | 4   | 7        | 8    | 5                                | 9           | 9                          | 6                               | 11/1988            | Ziecker et al.            |  | 239                        | 298                      |            |                               |  |
|  | A.F | 4   | 8        | 1    | 5                                | 6           | 6                          | 0                               | 3/1989             | Boger                     |  | 239                        | 8                        |            |                               |  |
|  | A.G | 4 8 4 4   |          |      |                                  |             | 0                          | 3                               | 7/1989             | Slautterback et al.       |  | 118                        | 323                      |            |                               |  |
|  | A.H | 4   | 9        | 6    | 9                                | 6           | 0                          | 2                               | 11/13/1990         | Scholl                    |  | 239                        | 298                      |            |                               |  |
|  | A.I | 4   | 9        | 8    | 3                                | 1           | 0                          | 9                               | 1/1991             | Miller et al.             | ·                                      | 425                        | 7                        |            |                               |  |
| ,  | A.J | 5   | 0        | 6    | 5                                | 9           | 4                          | 3                               | 11/19/1991         | Boger et al.              |  | 239                        | 298                      |            |                               |  |
|  | A.K | 5   | 1        | 6    | 9                                | 0           | 7                          | 1                               | 12/1992            | Boger et al.              |  | 239 29                     |                          | ·          |                               |  |
|  |     |   |          |      | FC                               | RE          | IGN                        | PAT                             | ENTS OR PU         | BLISHED FOREIGN PA        | ATENT A                                | PPLICATION                 | S                        |            |                               |  |
|  |     |   |          |      | MEN<br>BEF                       |             |                            | Ы                               | UBLICATION<br>DATE |                           | COUNTRY OR<br>PATENT OFFICE            |                            | SUBCLASS                 |            | TRANSLATION<br>(YES/NO)       |  |
|  | A.L | 200   | )125     | 5949 | 97                               |             |                            | 9/2                             | 5/2001 JP          |                           |  |                            |                          |            | Abstract Only                 |  |
|  | A.M | 093   | 3600     | 00   |                                  |             |                            | 8/1                             | 8/1999             | EP                        |  |                            |                          |            |                               |  |
|  | A.N | 079   | 9274     | 14 A | 2                                |             |                            | 3/1                             | 997                | EP                        |  |                            |                          |            |                               |  |
|  | A.O | 115   | 5574     | 45 A | 2                                |             |                            | 11/                             | 21/2001            | EP                        |  |                            |                          |            | `                             |  |
|  | A.P | 112   | 2447     | 774/ | ۹                                |             |                            | 9/1                             | 999                | JP                        |  |                            |                          |            |                               |  |
|  | A.Q | 99/   | 597      | 32   |                                  |             |                            | 11/                             | 25/1999            | PCT                       |  |                            |                          |            |                               |  |
|  |     |   |          |      | 0                                | THE         | R C                        | ocu                             | JMENTS (Inclu      | uding Author, Title, Date | e, Place o                             | of Publication             | )                        |            |                               |  |
|  | A.R |   |          |      |                                  | wei,<br>199 |                            | g-Lec                           | ging in the Me     | elt Spinning Process, Po  | olymer Er                              | ngineering an              | d Science                | e, Vol 3   | 8, No. 2, pgs. 341-           |  |
|  | A.S | J&M Laboratories, <u>Durastitch™ Technology</u> , New Product Release Manual, February 1997                         |          |      |                                  |             |                            |                                 |                    |                           |  |                            |                          |            |                               |  |
|  | A.T | Rajiv S. Rao et al., Vibration and Stability in the Melt Blowing Process, Ind. Eng. Chem., 32, pgs. 3100-3111, 1993 |          |      |                                  |             |                            |                                 |                    |                           |  |                            |                          | 3111, 1993 |                               |  |
| EXAMINER   |     |   |          |      |                                  |             |                            |                                 |                    | DATE CONS                 | DATE CONSIDERED                        |                            |                          |            |                               |  |
| EXAMINER: Initial if citation considered, whether or not in conformance. Draw line through citation only if not in conformance and not considered. Include a copy of this form with next communication to applicant. |     |   |          |      |                                  |             |                            |                                 |                    |                           |  |                            |                          |            |                               |  |

| (MODIFIED) PATENT AND TRADE                   |                |                                      |                                    |                                  |            |       |                                 |             |                       | ENT OF COMMERCE FRADEMARK OFFICE |                          |                      |         | SERIAL NO.<br>10/510,551 |                               |
|---|----------------|--------------------------------------|------------------------------------|----------------------------------|------------|-------|---------------------------------|-------------|-----------------------|----------------------------------|--------------------------|----------------------|---------|--------------------------|-------------------------------|
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT |                |                                      |                                    |                                  |            |       |                                 |             |                       | SIPE EN                          | Joel E. Saine            |                      |         |                          |                               |
|   |                |                                      | (Us                                | e se                             | ever       | al st | neet                            | s if ne     | ecessary)             | MAY O 2 2000 E                   | FILING DATE GROUP        |                      |         | Ρ                        |                               |
| (37 CFR 1.98                                  | (b))           |                                      |                                    |                                  |            |       |                                 |             | 1/3                   | MAN &                            |                          | October 7, 2004 2877 |         |                          |                               |
|   |                | _                                    |                                    |                                  |            |       |                                 | <del></del> | U.S.V                 | TENT DOCUMENTS                   |                          |                      | _       |                          |                               |
| EXAMINER<br>INITIAL                           |                | _                                    | PA                                 | TEN                              | NT N       | NUM   | BEF                             | ۲           | ISSUE DATE            | PATENTEE                         | CLASS S                  |                      | SUBC    | LASS                     | FILING DATE<br>IF APPROPRIATE |
| · · · · · · · · · · · · · · · · · · ·         | B.A            | 5                                    | 1                                  | 1 7 1 5 1 2 12/1992 Mende et al. |            |       |                                 |             |                       |                                  | 264                      | 555                  |         |                          |                               |
|   | B.B            | 5 1 9 4 1 1 5 3/1993 Ramspeck et al. |                                    |                                  |            |       |                                 |             | 3/1993                |                                  | 156                      | 578                  |         |                          |                               |
|   | B.C            | 5 2 6 7 6 9                          |                                    |                                  |            |       | 9                               | 3           | 12/1993               | Dickey                           |                          | 239                  | 417.3   |                          |                               |
| · · · · · · · · · · · · · · · · · · ·         | B.D            | 5 3 4 2 6 4                          |                                    |                                  |            |       |                                 | 7           | 8/1994 Heindel et al. |                                  |                          | 427                  | 2.31    |                          |                               |
|   | B.E            | 5 5 5 3 7 5                          |                                    |                                  |            |       |                                 | 8           | 9/1996                |                                  | 222                      | 533                  |         |                          |                               |
|   | B.F            | 5 6 4 5 2 2                          |                                    |                                  |            |       |                                 | 0 -         | 7/1997 Hohndord       |                                  |                          | 239                  | 301     |                          |                               |
|   | B.G            | 5                                    | 7 8 5 2 5 8 7/1998 Akin et al. 239 |                                  |            |       |                                 |             |                       | 239                              | 590                      |                      |         |                          |                               |
|   | в.н            | 5                                    | 8                                  | 8                                | 2          | 5     | 7                               | 3           | 3/1999                | Kwok et al.                      |                          | 264                  | 510     |                          |                               |
|   | B.I            | 5                                    | 9                                  | 0                                | 2          | 5     | 4                               | 0           | 5/1999                | Kwok                             |                          | 264                  | 555     |                          |                               |
|   | B.J            | 5                                    | 9                                  | 0                                | 4          | 2     | 9                               | 8           | 5/1999                | Kwok et al.                      | 239 135                  |                      |         |                          |                               |
|   | B.K            | 5                                    | 9                                  | 2                                | 1          | 4     | 4 7 6 7/1999 Akin et al. 239 59 |             |                       |                                  |                          | 590                  |         |                          |                               |
|   |                |                                      |                                    | 5                                | FC         | RE    | IGN                             | PAT         | ENTS OR PU            | BLISHED FOREIGN PA               | TENT A                   | PPLICATION           | S       |                          |                               |
|   |                |                                      |                                    |                                  | MEI<br>BEF |       |                                 | P           | UBLICATION<br>DATE    |                                  | COUNTRY OR PATENT OFFICE |                      | SUBCL   | ASS                      | TRANSLATION<br>(YES/NO)       |
|   | B.L.           |                                      |                                    |                                  |            |       |                                 |             |                       |                                  |                          |                      |         |                          |                               |
|   | В.М            |                                      |                                    |                                  |            |       |                                 |             |                       |                                  |                          |                      |         |                          |                               |
|   | B.N            |                                      |                                    |                                  |            |       |                                 |             |                       |                                  |                          |                      |         |                          |                               |
|   | B.O            |                                      |                                    |                                  |            |       |                                 |             |                       |                                  |                          |                      |         |                          |                               |
|   | B.P            | -                                    |                                    |                                  |            |       |                                 |             |                       |                                  |                          |                      |         |                          |                               |
|   | B.Q            |                                      |                                    |                                  |            |       |                                 |             |                       |                                  |                          |                      |         |                          |                               |
| _   |                |                                      |                                    |                                  | С          | тні   | ER (                            | oocı        | JMENTS (Incl          | uding Author, Title, Date        | , Place o                | f Publication)       | )       |                          |                               |
|   | B.R            |                                      |                                    |                                  |            |       |                                 |             |                       |                                  |                          |                      |         | ***                      |                               |
|   | B.S            |                                      |                                    |                                  |            |       |                                 |             |                       |                                  |                          |                      |         |                          |                               |
|   | В.Т            |                                      |                                    |                                  |            |       |                                 |             |                       |                                  |                          | <u></u>              |         |                          |                               |
| EXAMINER                                      |                |                                      |                                    |                                  |            |       |                                 |             |                       | DATE CONS                        | DATE CONSIDERED          |                      |         |                          |                               |
| EXAMINER: Include a copy                      | nitial if cita | atio                                 | n co                               | nsio                             | dere       | d, w  | heth<br>nunio                   | ner or      | not in conform        | mance. Draw line throug          | h citation               | only if not in       | conform | ance <u>an</u>           | d not considered.             |

| SUBSTITUTE FORM PTO-1449<br>(MODIFIED)   |     |                                     |                                       |     |            |     |      | U.<br>Pa | S. DEPARTM<br>ATENT AND | ENT OF COMMERCE            | ATTY.<br>NOR-1                            | DOCKET NO<br>051A | ).                      | SERIAL NO.<br>10/510,551 |                         |  |
|--|-----|-------------------------------------|---------------------------------------|-----|------------|-----|------|----------|-------------------------|----------------------------|---|-------------------|-------------------------|--------------------------|-------------------------|--|
|  |     |                                     |                                       |     |            |     |      | OSURE O  | 112 00                  | APPLICANT<br>Joel E. Saine |   |                   |                         |                          |                         |  |
| (Use several sheets if necessary) MM 0 1 |     |                                     |                                       |     |            |     |      |          |                         | WAX 0 5 JULY RE            | FILING DATE GROUP<br>October 7, 2004 2877 |                   |                         |                          | P                       |  |
|  |     |                                     |                                       |     |            |     |      |          | U.S                     | TENT DOMENTS               |   | •                 |                         |                          |                         |  |
| EXAMINER<br>INITIAL                      |     |                                     | PA                                    | TEN | N TI       | IUM | BEF  | ₹        | ISSUE<br>DATE           | PATENTEE                   |   | CLASS             | CLASS SUBCLASS FILING C |                          |                         |  |
|  | C.A | 6 1 4 9 0 7 6 11/2000 Riney         |                                       |     |            |     |      |          | 11/2000                 |                            | 239                                       | 135               |                         |                          |                         |  |
|  | С.В | 6                                   | 2                                     | 1   | 0          | 1   | 4    | 1        | 4/2001                  | Allen                      |   | 425               | 7                       |                          |                         |  |
| ·  | C.C | 6 2 5 0 3 5 7 6/26/2001 Niedermeyer |                                       |     |            |     |      |          | 6/26/2001               | Niedermeyer                |   | 156               | 436                     |                          |                         |  |
|  | C.D | 6 3 0 8 8 6 4                       |                                       |     |            |     |      | 4        | 10/2001                 | 10/2001 Messer             |   |                   | 137                     |                          |                         |  |
|  | C.E | 6                                   | 6 3 1 1 8 9 9 11/2001 Hidaka et al.   |     |            |     |      |          |                         | 239                        | 298                                       |                   | ·                       |                          |                         |  |
|  | C.F | 6 3 2 2 6 3                         |                                       |     |            |     |      | 0        | 11/2001                 | Carroll et al.             |   | 118               | 681                     |                          |                         |  |
|  | C.G | 6                                   | 6 3 6 1 6 3 4 3/2002 White et al. 156 |     |            |     |      |          |                         | 156                        | 161                                       |                   |                         |                          |                         |  |
|  | C.H | 6 4 3 5 4 2 5 8/2002 Saidman 23     |                                       |     |            |     |      |          | 8/2002                  | 239                        | 290                                       |                   |                         |                          |                         |  |
|  | C.I |                                     |                                       |     |            |     |      |          |                         |                            |   |                   |                         |                          |                         |  |
|  | C.J |                                     |                                       |     | Г          |     |      |          |                         |                            |   |                   |                         |                          |                         |  |
|  | C.K |                                     |                                       |     |            |     |      |          |                         |                            |   |                   |                         |                          |                         |  |
|  |     |                                     |                                       |     | FC         | RE  | IGN  | PAT      | ENTS OR PU              | BLISHED FOREIGN PA         | TENT AF                                   | PPLICATION        | s                       |                          |                         |  |
|  |     |                                     |                                       |     | MEN<br>BER |     |      | PI       | UBLICATION<br>DATE      | COUNTRY OF PATENT OFFIC    |   | CLASS             | SUBCL                   | ASS                      | TRANSLATION<br>(YES/NO) |  |
|  | C.L |                                     |                                       |     |            |     |      |          |                         |                            |   |                   |                         |                          |                         |  |
|  | С.М |                                     |                                       |     |            |     |      |          |                         |                            |   |                   |                         |                          |                         |  |
|  | C.N |                                     |                                       |     |            |     |      | <u> </u> |                         |                            |   |                   |                         |                          |                         |  |
|  | c.o |                                     |                                       |     |            |     |      |          |                         |                            |   |                   |                         |                          |                         |  |
|  | C.P | _                                   |                                       |     |            |     |      |          |                         |                            |   |                   | <del>,</del>            |                          |                         |  |
|  | c.Q |                                     |                                       |     |            |     |      | <u> </u> |                         |                            |   |                   |                         |                          |                         |  |
|  |     |                                     |                                       |     | 0          | THE | ER [ | ocu      | JMENTS (Incl            | uding Author, Title, Date  | , Place o                                 | f Publication     | )                       |                          |                         |  |
|  | C.R |                                     |                                       |     |            |     |      |          |                         |                            |   |                   |                         |                          |                         |  |
|  | c.s |                                     |                                       |     |            |     |      |          |                         |                            |   |                   |                         |                          |                         |  |
|  | C.T |                                     |                                       |     |            |     |      |          |                         |                            |   |                   |                         |                          |                         |  |
| EXAMINER                                 |     |                                     |                                       |     |            |     |      |          |                         | DATE CONS                  | DATE CONSIDERED                           |                   |                         |                          |                         |  |
| EXAMINER: In Include a copy              |     |                                     |                                       |     |            |     |      |          |                         | nance. Draw line throug    | h citation                                | only if not in    | conform                 | ance <u>an</u>           | d not considered.       |  |